



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

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December 21, 2007

Pamela Blakley
U.S. EPA, Region 5
77 W. Jackson Blvd (AR-18J)
Chicago, IL 60604

Re: Responses to Issues Concerning Minor New Source
Review State Implementation Plan Submittal for Indiana

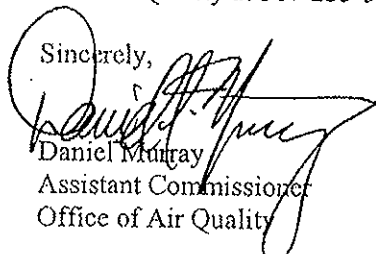
Dear Pam:

The Indiana Department of Environmental Management (IDEM) and United States Environmental Protection Agency (U.S. EPA) have worked together for several years to identify and resolve questions and deficiencies with Indiana's Minor New Source Review submittal of February 3, 1999. On October 29, 2007, U.S. EPA staff forwarded the most recent revised list of those issues for review and response. This letter and attachment serve as our response to those issues. IDEM's responses appear as highlighted text after the description of each issue in the summary at the end of the document.

IDEM has initiated a rulemaking to address deficiencies identified by U.S. EPA and to clarify language that was found to be confusing or inconsistent within Indiana's air rules. These revisions will be submitted to U.S. EPA as a revision to the state implementation plan when the rule is complete. Based on Indiana's rulemaking process, we anticipate that the revised rule will be complete in late 2008.

IDEM appreciates the assistance you and other U.S. EPA staff have provided throughout this effort. I request that U.S. EPA approve the parts of Indiana's state implementation plan that can be approved as expeditiously as possible. If you have any questions regarding this submittal, please contact Scott Deloney, Air Programs Branch Chief, Office of Air Quality at 317-233-5694.

Sincerely,


Daniel Murray
Assistant Commissioner
Office of Air Quality

Attachments: Minor NSR Issues and IDEM Responses

cc: Sam Portanova,, U.S. EPA Region 5
Louise Gross, U.S. EPA Region 5
Cheryl Newton, U.S. EPA Region 5
Scott Deloney, IDEM
Christine Pedersen, IDEM
Doug Wagner, IDEM
SIP file

10/29/07

IN Minor NSR Rule - List of Potential Disapproval Issues:

1) The Indiana definition of "construction" (326 IAC 1-2-21) exempts installation of building supports and foundations, laying underground piping or arbors, erection of storage structures, dismantling of existing equipment and control devices, ordering of equipment and control devices, offsite fabrication, temporary storage. This definition does not apply to major PSD/NSR, but does apply to minor and synthetic minor permitting actions. This definition of "construction" is less stringent than the federal definition and allows certain activities such as installation of building supports and foundations prior to permit issuance. EPA does not find acceptable a provision that allows such sources to establish "equity in the ground" prior to completing the permitting process.

(check with OAQPS on this as part of our review of the "interim construction" (326 IAC 2-1-3) provision)

2) Definition of "modification" (1-2-42) is based on potential-to-potential test. This only applies to minor NSR applicability. Synthetic minors still have to satisfy the PSD/NSR test. This is likely to be approvable but, we are including this as part of our description of emission thresholds for a public notice requirement.

(check with OAQPS on this as part of our questions on the minor NSR emission thresholds. See #9 below.)

3) Definition of "minor physical change" (2-1.1-2(6)) includes, but is not limited to the following:

Reconfiguration or movement of existing equipment;

Replacement, reconfiguration, or addition of ancillary equipment; or

Replacement or addition of pollution control device.

Since this definition is not limited to the items above, it gives the state discretion to define other modifications as minor physical changes. **Ancillary equipment is not defined in the state rules. This could create broad discretion as to what can qualify under this definition.**

Actions meeting the definition of "minor physical change" qualify for an exemption under 326 IAC 2-1.1-3(h)(2). This exemption does not apply to modifications above the PSD/NSR threshold. This exemption applies to any "change in method of operation". Since this definition is broadly defined, the exemption could apply to modifications just below the major source threshold. **This is an approval issue.**

4) Several exemption provisions in 326 IAC 2-1.1-3(e)(5-46) include the phrase "including, but not limited to..." This language is vague and could be interpreted to apply to any activities. **This is an approval issue.**

5) 326 IAC 2-1.1-3(f) provides an exemption from Title V, FESOP, and SSOA requirements for sources complying with the permit-by-rule provision in 2-10 and 2-11. 2-10 and 2-11 are not SIP-approved, therefore this provision allows for a Title V exemption based on a rule that is not SIP-approved. **This is an approval issue.**

6) As discussed in item #3, 326 IAC 2-1.1-3(h)(2) provides for exemptions from the permitting requirements. Within this provision, 326 IAC 2-1.1-3(h)(2)(A) and (B) say sources with significance levels above the PSD and NSR thresholds do not qualify for an exemption. However, these items also add the language “...when subject only to specific emission limits contained in this title.” According to IDEM, the origin of quoted language is unclear and may have been an attempt to link this provision to existing emission limits for the equipment or process to be modified. The modification would be exempt as long as it doesn't trigger PSD and doesn't require a limit change. IDEM has agreed to determine the purpose of this language and to clarify this provision. However, **this is not an approval issue** since 326 IAC 2-1.1-3(c) and 326 IAC 2-1.1-4 assure that PSD and major NSR sources do not qualify for exemptions under this section.

7) 326 IAC 2-1.1-3(h)(3) provides an exemption for temporary emissions with limits of 25 tpy and 30 day duration. We are concerned that the Indiana rule would allow a large amount of emissions over a short period of time. For example, this provision would allow 25 tons of emissions in a 30-day period. **These projects may have adverse impacts on NAAQS and it is unclear how Indiana tracks the air quality impact of such sources.**

8) 326 IAC 2-1.1-12 allows sources to establish an emissions cap program for one or more pollutants. **IDEM has agreed to withdraw this provision from the submittal.** This rule is referenced in 2-8-3(c)(7), 2-8-4(11), and 2-8-15(b). **IDEM will need to remove these references from the rule.**

9) Permit exemption levels under 2-5.1-3(a), 2-7-10.5(d)(3), and 2-8-11.1(d)(4) below which public notice is not required. 326 IAC 2-5.1-3(a) applies to new sources minor construction permit requirements, 2-7-10.5(d)(3) applies to minor construction permit requirements at existing Title V sources, and 2-8-11.1(d)(4) applies to minor construction permit requirements at existing FESOP sources. (The same public notice thresholds appear in 2-5.1-3(a), 2-7-10.5(d)(3), and 2-8-11.1(d)(4).)

25 tpy	PM, PM10, SO2, NOx, VOC, hydrogen sulfide (H2S), total reduced sulfur (TRS), reduced sulfur compounds, fluorides
100 tpy	CO
25 tpy	Any combination of HAPs
10 tpy	A single HAP
5 tpy	Lead
1 tpy	Lead (for primary and secondary lead smelters, primary copper smelters, lead gasoline additive plant, or lead-acid storage battery manufacturing plant)

(Issue elevated to OAQPS)

10) Issues with 2-7-10.5:

10a) 2-7-10.5(b) and 326 IAC 2-8-11.1(b): provides an exemption from permit revision requirements for repair or replacement of an emission unit if the repair or replacement: 1) results in no increase in potential emissions; 2) is not a major modification under 326 IAC 2-2 (PSD), 326 IAC 2-3 (nonattainment NSR), or 326 IAC 2-4.1 (section 112(g) of the Act); and 3) either returns the emission unit to normal operation after failure or

prevents an imminent failure. EPA is concerned that this provision can be broadly applied such that many modifications can be argued to "prevent imminent failure." This is an approval issue. IDEM considering adding language to clarify that this only applies to emergencies and malfunctions, but this would require rule revisions.

10b) 2-7-10.5(d)(2) and 326 IAC 2-8-11.1(d)(2): An addition of a portable source or a relocation of a portable source to an existing source if such an action would require a change to permit conditions. Not an issue with relocation of an existing portable sources because they are already permitted. However, this provision allows a source to add a new portable source without public notice. Some new portable sources may otherwise qualify for a significant modification. EPA is concerned that the addition of a significant source could avoid public review. *(check with O&OPS on this as part of our questions on the minor NSR emission thresholds. See #9.)*

10c) 2-7-10.5(d)(4) and 326 IAC 2-8-11.1(d)(5): This provision allows sources to obtain certain restrictions (synthetic minor limits) to avoid significant modification status, and thus avoid public notice.

For example, this provision is available for control devices achieving 99% efficiency. It is not practical to certify 99% efficiency for some control equipment (i.e.; PM emissions for a baghouse). IDEM wants to change this specific provision to an outlet grain loading limit.

Also, 326 IAC 2-8-11.1(d)(7): This provision allows a modification for which a source requests an emission limit to avoid 326 IAC 8-1-6 to qualify as a "minor permit revision" (FESOP sources).

In addition to concerns over the ability to verify synthetic minor limits for this provision, EPA is concerned with synthetic minor sources avoiding public notice. *(check with O&OPS on this as part of our questions on the minor NSR emission thresholds. See #9.)*

10d) 2-7-10.5(d)(5): Modifications at Title V sources which are subject to a RACT, NSPS, or NESHAP not listed in 2-8-10(a)(15) or 2-8-10(a)(16) and where that standard is the most stringent applicable requirement are eligible for the minor source modification process (this does not apply to modifications subject to the requirements of Section 112(g) of the Act).

Also, 326 IAC 2-8-10(a)(15): Modifications at FESOP sources which are subject to six listed RACT, NSPS, or NESHAP and where that standard is the most stringent applicable requirement qualify for an administrative amendment. This does not apply to modifications subject to the requirements of Section 112(g) of the Act. **326 IAC 2-8-10(a)(16):** Incorporates a modification that is subject to a list of NSPS standards and is not subject to 326 IAC 8-1-6.

Also, 326 IAC 2-8-11.1(d)(6): Modifications at FESOP sources which are subject to a RACT, NSPS, or NESHAP not listed in 2-8-10(a)(15) or 2-8-10(a)(16) and where that standard is the most stringent applicable requirement are eligible for the minor permit revision process (this does not apply to modifications subject to the requirements of Section 112(g) of the Act).

prevents an imminent failure. EPA is concerned that this provision can be broadly applied such that many modifications can be argued to "prevent imminent failure." This is an approval issue. IDEM considering adding language to clarify that this only applies to emergencies and malfunctions, but this would require rule revisions.

10b) 2-7-10.5(d)(2) and 326 IAC 2-8-11.1(d)(2): An addition of a portable source or a relocation of a portable source to an existing source if such an action would require a change to permit conditions. Not an issue with relocation of an existing portable sources because they are already permitted. However, this provision allows a source to add a new portable source without public notice. Some new portable sources may otherwise qualify for a significant modification. EPA is concerned that the addition of a significant source could avoid public review. *(check with OAQPS on this as part of our questions on the minor NSR emission thresholds. See #9.)*

10c) 2-7-10.5(d)(4) and 326 IAC 2-8-11.1(d)(5): This provision allows sources to obtain certain restrictions (synthetic minor limits) to avoid significant modification status, and thus avoid public notice.

For example, this provision is available for control devices achieving 99% efficiency. It is not practical to certify 99% efficiency for some control equipment (i.e.; PM emissions for a baghouse). IDEM wants to change this specific provision to an outlet grain loading limit.

Also, 326 IAC 2-8-11.1(d)(7): This provision allows a modification for which a source requests an emission limit to avoid 326 IAC 8-1-6 to qualify as a "minor permit revision" (FESOP sources).

In addition to concerns over the ability to verify synthetic minor limits for this provision, EPA is concerned with synthetic minor sources avoiding public notice. *(check with OAQPS on this as part of our questions on the minor NSR emission thresholds. See #9.)*

10d) 2-7-10.5(d)(5): Modifications at Title V sources which are subject to a RACT, NSPS, or NESHAP not listed in 2-8-10(a)(15) or 2-8-10(a)(16) and where that standard is the most stringent applicable requirement are eligible for the minor source modification process (this does not apply to modifications subject to the requirements of Section 112(g) of the Act).

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Also, 326 IAC 2-8-11.1(d)(6): Modifications at FESOP sources which are subject to a RACT, NSPS, or NESHAP not listed in 2-8-10(a)(15) or 2-8-10(a)(16) and where that standard is the most stringent applicable requirement are eligible for the minor permit revision process (this does not apply to modifications subject to the requirements of Section 112(g) of the Act).

This would allow increases up to the major source threshold that trigger one of these standards to avoid the public comment process. This allows synthetic minor limits to be established without public notice. FESOP sources under 2-8-10(a)(15) can proceed with construction immediately upon submittal of request. *(check with OAQPS on this as part of our questions on the minor NSR emission thresholds. See #9.)*

10e) 2-7-10.5(d)(8) and 2-8-10(a)(14): Modifications that add emission units of the "same type" that are already permitted and will comply with the same applicable requirements and permit terms and conditions as the existing emissions units. This provision does not apply to modifications that exceed the significance threshold under 326 IAC 2-2 or 326 IAC 2-3. This allows modifications with up to 100 tpy in emissions increases to be permitted through minor modifications with no public notice. This allows new synthetic minor limits to be established without public notice. FESOP sources can proceed with construction immediately upon submittal of request.

The term "same type" for this provision is not defined. This is not acceptable since the term could be broadly defined to allow many sources to qualify for this provision. This is an approval issue.

(check with OAQPS on this as part of our questions on the minor NSR emission thresholds. See #9.)

11) Issues with 326 IAC 2-8-10 - actions qualifying for FESOP administrative amendment. Sources can proceed with construction immediately upon submittal of request.

(11a, b, c combined as one issue.)

11a) 2-8-10(a)(7): Modifications that incorporate alternative testing or compliance monitoring requirements that have been approved by EPA under 40 CFR Part 60, 61, or 63.

11b) 2-8-10(a)(8): Incorporates newly-applicable monitoring or testing requirements specified in 40 CFR Part 60, 61, or 63, including removal of requirements that no longer apply as a result in change in applicability.

11c) 2-8-10(a)(9): Incorporates test methods or monitoring requirements specified in an applicable requirement that the source may use as an alternative to the requirements specified in the permit.

This appears to be acceptable. Sources qualifying for this provision are not subject to Title V and there are no federal requirements to have these provisions in an operating permit for non-Title V sources. In addition, a switch to an alternative monitoring or testing method that is already specified in an applicable requirement does not trigger construction permit requirements.

11d) 2-8-10(a)(12): Allows modifications that meet the SSOA applicability criteria under 326 IAC 2-9 and do not require an adjustment to the source's potential to emit. Most SSOAs are not SIP-approved. Future provisions could be added to 326 IAC 2-9 without

EPA review which would qualify modifications for an administrative amendment. **This is an approval issue.**

12) Issues with 326 IAC 2-8-11.1(d) - actions qualifying for FESOP minor permit revision:

a) 326 IAC 2-8-11.1(d)(1): Modifications that **reduce** the frequency of any monitoring or reporting requirement. EPA is concerned that a reduction in monitoring frequency could avoid public review. This would apply to monitoring previously included in a synthetic minor permit.

(check with OAQPS on this as part of our questions on the minor NSR emission thresholds. See #9.)

13) Interim construction approval (326 IAC 2-13). This provision allows sources to obtain interim approval to begin construction prior to permit issuance. This is available to most projects that do not trigger PSD/NSR. It is only for modifications at existing permitted sources and is not available for nonattainment pollutants. This rule allows for interim synthetic minor limits.

(Issue elevated to OAQPS.) This provision is severable provision if not approvable.

PLEASE NOTE: This list is from an older document and the changes that IDEM has recommended here are not necessarily included in the Article 2 Fix-up Rule. The Second Notice of Comment Period for LSA# 07-372 contains the full list of changes contemplated for the Article 2 Fix-up Rule.

Summary of Issues:

Issues Elevated to OAQPS:

1. Pre-permit construction activities. Main issues of concern identified by Region 5:
Sources can install foundations.
Interim construction rule available for synthetic minors. Interim construction rule is severable from rest of submittal.
2. Public notice exemptions. Main Regions 5 issues:
25 tpy thresholds (100 tpy for CO) based on PTE.
New portable sources.
Some synthetic minor limits qualify (i.e.; controls w/ 99% efficiency).
New units that are "same type" as existing units.
Reduction in monitoring frequency.

Disapproval Issues:

3. Definition of "minor physical change". Qualifying sources are exempted from minor source permitting.

IDEM will remove the definition of "minor physical change" because it is only used in 326 IAC 2-1.1-3(h)(2). Instead the specific criteria will be added to the list of miscellaneous equipment and activities in 326 IAC 2-1.1-3(e)(46). The term "ancillary" has been removed and replaced with "secondary" to read as follows: "The replacement, reconfiguration, or addition of secondary equipment that supports an emission unit."

4. Use of phrase "including, but not limited to..." Qualifying sources are exempted from minor source permitting.

IDEM will clarify these provisions with the phrase "as follows" instead of "including, but not limited to..."

5. Permit-by-rule (not SIP approved) sources are exempt from Title V requirements.

IDEM has prepared a SIP submittal requesting the approval of 326 IAC 2-10 and most of 326 IAC 2-11. Revisions are needed to 326 IAC 2-11-4; once they are complete this section will also be submitted for approval into the SIP.

6. Repair and replacement exemption. Qualifying sources exempted from minor source permitting. Provision could be broadly applied.

IDEM will change the rule language to read as follows:

326 IAC 2-7-1.05(b)

(b) Notwithstanding any other provisions of this rule **and only in the case of an emergency or malfunction**, the owner or operator of a source may:

(1) repair or replace an emissions unit or air pollution control equipment or components thereof without prior approval if the repair or replacement:

(1) ~~(A)~~ **(A)** results in a potential to emit for each regulated pollutant that is less than or equal to the potential to emit of the equipment or the affected emissions unit that was repaired or replaced;

~~(2)~~ **(B)** is not a major modification under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-4.1; and

~~(3)~~ **(C)** returns the emission unit, process, or control equipment to normal operation after an upset, malfunction, or mechanical failure or prevents impending and imminent failure of the emissions unit, process, or control equipment; **or**

(2) **modify or add an insignificant or trivial activity if the new activity or modified activity;**

(A) meets the definition of insignificant or trivial activity;

(B) has all applicable requirements and associated monitoring of the current permit;

(C) is not a modification under any provision of Title I of the CAA.

If the repair or replacement qualifies as a reconstruction or is a complete replacement of an emissions unit or air pollution control equipment and would require a modification approval or operating permit ~~revision~~ **modification** under a provision of this rule, the owner or operator of the source must submit an application for a permit or permit ~~revision~~ **modification** to the commissioner no later than thirty (30) calendar days after initiating the repair or replacement.

326 IAC 2-8-11.1(b)

(b) Notwithstanding any other provision of this rule **and only in the case of an emergency or malfunction**, the owner or operator of a source may repair or replace an emissions unit or air pollution control equipment, or components thereof **without prior approval**, if the repair or replacement:

(1) results in a potential to emit for each regulated pollutant that is less than or equal to the potential to emit for the equipment or the affected emissions unit that was repaired or replaced;

(2) is not a major modification under 326 IAC 2-2-1, 326 IAC 2-3-1, or 326 IAC 2-4.1; and

(3) returns the emissions unit, process, or control equipment to normal operation after an upset, malfunction, or mechanical failure or prevents impending and imminent failure of the emissions unit, process, or control equipment.

If the repair or replacement qualifies as a reconstruction or is a complete replacement of an emissions unit or air pollution control equipment and would require a permit or operating permit revision under a provision of this rule, the owner or operator of the

source must submit an application for a permit or permit revision to the commissioner no later than thirty (30) days after initiating the repair or replacement.

7. Administrative amendment changes available to modifications that meet SSOA requirements.

This rule provision has been used once, for an asphalt plant that wanted to add a crushing operation. The asphalt plant's FESOP did not require an adjustment to the source's potential to emit because the plant had previously taken limits that were less than 50% of the major source threshold. The crushing plant was issued a separate SSOA. The FESOP permit was administratively amended to note that the crushing plant had collocated with the asphalt plant. Since the crushing plant was portable, this made it possible for the crushing plant to easily relocate in the future. IDEM believes that this rule provision will continue to be rarely used, since most FESOP sources would have to adjust their potential to emit and would therefore not qualify for such a change as an administrative amendment. IDEM does wish to keep the provision as it is an incentive for FESOP sources to voluntarily take low emission limits.

Other issues that are not roadblocks to approval:

8. Exemptions do not apply to sources subject to PSD/NSR "when subject only to specific emission limits contained in this title." IDEM intends to clarify language.

IDEM will delete the confusing phrase.

9. IDEM intends to withdraw emissions cap provision from this submittal (severable from the rest of the submittal).

IDEM will delete 326 IAC 2-1.1-12 and remove the references from other parts of the rule.

10. Administrative amendment for incorporating new or alternative monitoring or testing at FESOP sources.

IDEM will remove this provision because a FESOP source would not need to apply for a SSOA.

Unresolved:

11. Temporary emissions exemption. Projects that emit less than 25 tons and have a duration of 30 days maximum. Concerns over short term emissions, however what rule would require this type of activity to get a minor permit?

IDEM issues this type of approval for experimental trials. For example, a cement kiln may get such an approval so that it may do stack testing to see what the emissions are from a new fuel or fuel mix. The source would then use the test results as the basis for an

emission calculation when it applies to IDEM for a permit modification to use the new fuel. In practice, sources do seek approval from IDEM to conduct these experimental trials. Even if the source does not seek an approval, there is a seven day notification requirement before the source can construct and operate. Experimental trials operate below the significance level. The 30 days of operation is not 30 continuous calendar days, but 30 days of operating time. A trial usually will operate for a few hours or days and then shutdown while the testing data is evaluated. It may then restart to collect more data.